

**REMARKS**

Claims 1-22 were pending before the Office. Claims 1, 5, 9 and 13 are hereby amended.

Applicants have amended page 1 of the specification to indicate the relationship between the instant application, the parent International application, and the provisional priority application, to each of which Applicants claim priority.

No new matter is added.

The amendments are made solely to claim more fully the invention and/or to expedite prosecution of the present application and should in no way be construed as an acquiescence to any of the Examiner's suggestions regarding prior art in the Office Action issued in the present application. Applicants reserve the right to pursue the subject matter of the claims as originally filed or similar claims in one or more subsequent applications.

Support for the amendments can be found throughout the originally-filed application, including the specification, drawings, examples and claims.

Pursuant to 35 U.S.C. §§ 121 and 372, and in view of 37 C.F.R. § 1.499 and PCT Rules 13.1 and 13.2, the Office Action requires an election of a single invention to which the claims must be restricted.

The Office Action requires election of a single group selected from the following groups:

**Groups I**, claims 3 and 7, drawn to a method of monitoring a response by the expression level of nucleic acids;

**Group II**, claims 4 and 8, drawn to a method of prognosis by the expression level of polypeptides;

**Group III**, claim 11, drawn to a method of identifying a compound useful for treating a cancer patient by analyzing the expression level of one or more genes;

**Group IV**, claim 12, drawn to a method of identifying a compound useful for treating a cancer patient by analyzing the expression level of one or more polypeptides;

**Group V**, claim 14, drawn to a method for diagnosis for cancer by analyzing the expression level of one or more nucleic acids;

**Group VI**, claim 15, drawn to a method for diagnosis for cancer by analyzing the expression level of one or more polypeptides;

**Group VII**, claims 16, and 18-19, drawn to a nucleic acid; and

**Group VIII**, claims 17 and 20-22, drawn to a polypeptide.

The Office Action further states that the restriction between Groups I and II is subject to the nonallowance of linker claims, claims 1-2 and 5-6, which link Groups I and II.

In addition, the Office Action indicates that the restriction between Groups III and IV is subject to the nonallowance of the linker claims, claims 9-10, which link Groups III and IV.

The Office Action further indicates that the restriction between Groups V and VI is subject to the nonallowance of claim 13, which is named as a linking claim to those groups.

**Applicants provisionally elect, with traverse, Group III.** Upon allowance of linking claims 9 and 10, Applicants request rejoining and full examination of **Group IV** and any other claim that may depend from or otherwise include all of the limitations of linking claims 9 or 10, in accordance with 37 C.F.R. 1.104.

Applicants reserve the right to file divisional applications to any non-elected subject matter. Reconsideration and withdrawal of the restriction requirement are respectfully requested in view of the remarks that follow.

The Office Action contends that the separate groups of inventions of Groups I-VIII “do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features.” The Office Action suggests that the features of Group I claims are present in the prior art (Tershim et al., Eur. J. Cancer, 2002, 38:2375-2381), and thus, those features of Group I are not “a special technical feature” under PCT Rule 13.2. Applicants do not concede the validity of the Examiner’s assertion. Nevertheless, in order to clarify the present invention, Applicants have amended the claims to clarify that the one or more genes or gene products whose expression is analyzed by the methods of the invention are regulated by histone deacetylase. Since the asserted prior art does not teach or suggest the analysis of genes or gene products whose expression is regulated by histone deacetylase, each of the claims contains a corresponding special technical feature under PCT Rule 13.2 that defines a contribution over the prior art.

Applicants respectfully point out that the M.P.E.P. in Section 1850(II) that “an international application should relate to only one invention or, if there is more than one invention, the inclusion of those inventions in one international application is only permitted if all inventions are so linked as to form a single general inventive concept. With respect to a group of inventions claimed in an international application, unity of invention exists only when there is a technical relationship among the claimed inventions involving one or more of the same or corresponding special technical features. The expression “special technical features” is defined in PCT Rule 13.2 as meaning those

technical features that define a contribution which each of the inventions, considered as a whole, makes over the prior art.”

The restriction requirement is not deemed proper because each of the claims of Groups I through VIII are linked so as to form a single general inventive concept; namely, methods for predicting cancer, measuring responses to or identifying new anti-cancer drugs, e.g., HDAC inhibitors, by analyzing the expression of genes or their products which are regulated by histone deacetylase. Since the Groups of the invention are linked by the above “special technical features” as required under PCT Rule 13.2, a restriction should not be proper.

The Office Action also requires Applicants to “elect one or a specific combination of SEQ ID NO, to which the claims will be limited,” which is “NOT an election of species.” The Examiner contends that the Office will suffer an undue burden because each of the nucleotide sequences, and their corresponding polypeptide sequences are structurally distinct chemical compounds “and lack a special technical feature under PCT Rule 13.2.” Applicants respectfully disagree.

Under PCT Rule 13.2, each of the sequences of the invention relate to those particular genes which have been discovered by the present inventors as markers of tumorigenesis and linked to HDAC regulation. Thus, variation in their expression levels under differing conditions (e.g., presence of anti-cancer drug, e.g., HDAC inhibitor) are useful in the evaluation of drug effects, patient diagnosis and/or response to drugs, or cancer prediction.

Since the Office Action does not expressly place a limit on the “specific combination” of electable SEQ ID NOS, Applicants hereby elect the combination of SEQ ID NOS. 1-19 as the elected nucleic acids and SEQ ID NOS. 20-37 as the elected polypeptides. Applicants believe these elections would place no undue burden on the examination of the present application in view of the

MPEP, which states that “to further aid the biotechnology industry in protecting its intellectual property without creating an undue burden on the Office, the Director has decided *sua sponte* to partially waive the requirements of 37 CFR 1.141 *et seq.* and permit a **reasonable number** of such nucleotide sequences to be claimed in a single application.” See M.P.E.P. § 803.04. The M.P.E.P. It is believed that the elected sequences represent a reasonable number of sequences in the context of the present invention.

In summary, enforcing the present restriction requirement would result in inefficiencies and unnecessary expenditures by both the Applicants and the PTO, as well as extreme prejudice to Applicants. Restriction has not been shown to be proper, especially since the requisite showing of a lack of unity of invention has not been made. Indeed, the search and examination of each species would likely be co-extensive and, in any event, would involve such interrelated art that the search and examination of the entire application can be made without undue burden on the Examiner.

Consequently, reconsideration and withdrawal of the requirement for restriction are respectfully requested.

**CONCLUSION**

In view of the amendments and remarks made herein, the application is believed to be in condition for allowance. Favorable reconsideration of the application and prompt issuance of a Notice of Allowance are respectfully requested. Please charge any required fee or credit any overpayment to Deposit Account No. 04-1105.

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Respectfully submitted,

By: /Gabriel J. McCool/  
Gabriel J. McCool  
Registration No.: 58,423  
Attorneys for Applicant  
EDWARDS ANGELL PALMER & DODGE LLP  
P.O. Box 55874  
Boston, MA 02205  
Telephone: 203-975-7505  
Facsimile: 203-975-7180